

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Dany Sylvain
Serial No. 10/693,540
Filed: 10/24/2003

Examiner: Phuong, Dai
Art Unit: 2617

For: **CALL TRANSFER FOR AN INTEGRATED WIRELINE AND WIRELESS
SERVICE USING A TEMPORARY DIRECTORY NUMBER**

Mail Stop Appeal Brief – Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

An **APPEAL BRIEF** is filed herewith. Appellant also encloses a payment in the amount of \$500.00 as required by 37 C.F.R. § 1.17(c). If any additional fees are required in association with this appeal brief, the Director is hereby authorized to charge them to Deposit Account 50-1732, and consider this a petition therefor.

APPEAL BRIEF

(1) REAL PARTY IN INTEREST

The real party in interest is the assignee of record, i.e., Nortel Networks Limited of 2351 Boulevard Alfred-Nobel, St. Laurent, Quebec Canada H4S 2A9, which is wholly owned by Nortel Networks Corporation, a Canadian corporation.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences to the best of Appellant's knowledge.

(3) STATUS OF CLAIMS

Claims 1-32 were rejected with the rejection made final on August 24, 2006.

Claims 1-32 are pending and are the subject of this appeal.

(4) STATUS OF AMENDMENTS

All amendments have been entered to the best of Appellant's knowledge. No amendments were made after the final rejection mailed August 24, 2006.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to a communication environment where calls are established with a single mobile terminal through either a wireless network or the public switched telephone network (PSTN) via a terminal adaptor, which is capable of wirelessly communicating with the mobile terminal. As such, the mobile terminal may facilitate traditional cellular calls via the wireless network, or traditional PSTN calls via the terminal adaptor. The terminal adaptor and mobile terminal communicate via a local wireless interface, and as such, communications via the PSTN through the terminal adaptor are only possible within a limited communication zone supported by the terminal adaptor. When the mobile terminal is involved in a call and within the communication zone of the terminal adaptor, calls are facilitated via the wireless interface with the terminal adaptor (Specification, paragraph 0005).

As the mobile terminal approaches the outer limits of the communication zone, the terminal adaptor will detect a decrease in its ability to facilitate effective communications with the mobile terminal and trigger the supporting telephony switch to effectively transfer the call to the mobile terminal through the wireless network, as well as register with the wireless network, if registration has not already taken place. Preferably, the mobile terminal is associated with a primary directory number that is associated with the PSTN. A temporary directory number for the mobile terminal is provided by the wireless network and is used for facilitating incoming calls, outgoing calls, and service transitions between the PSTN and wireless network (Specification, paragraph 0005). The mobile terminal will simply answer the new incoming call made to the temporary directory number associated with the mobile terminal when served by the wireless network. This effects a transition from the PSTN connection to the wireless connection. The terminal adaptor may interact with the supporting telephony switch to assist in establishing the call, as well as effecting the transition (Specification, paragraph 0006).

Claim 1 recites a method for transitioning a call with a dual mode mobile terminal (such as mobile terminal 12, Figure 1; see also Specification, paragraph 0018) from a wireline network (such as PSTN 22, Figure 1) to a wireless network (such as cellular access network 20, Figure 1), wherein the mobile terminal is provided with a primary directory number associated with the wireline network (Specification, paragraphs 0005, 0022, and 0023; see also Figure 1), the method comprising:

- a) receiving a request for a temporary directory number, which has been temporarily assigned to the mobile terminal by the wireless network (Specification, paragraphs 0005, 0023, 0024, 0030, and 0036; see also Figure 1, steps D, E, and/or F, and Figure 2B, steps 156 and 158);
- b) accessing the temporary directory number (Specification, paragraphs 0023, 0024, 0027, 0029, 0030, and 0037; see also Figure 1, steps G-I, and Figure 2B, steps 160-164); and
- c) providing the temporary directory number during the call to allow a wireless connection to be established with the mobile terminal via the wireless network (Specification, paragraphs 0005, 0006, 0017, 0024, 0026, 0031, 0037, and 0038; see also Figure 1, steps J-L, and Figure 2C, steps 174-196).

Claim 15 recites a system for transitioning a first call with a dual mode mobile terminal (such as mobile terminal 12, Figure 1; see also Specification, paragraph 0018) from a wireline network (such as PSTN 22, Figure 1) to a wireless network (such as cellular access network 20, Figure 1), wherein the mobile terminal is provided with a primary directory number associated with the wireline network (Specification, paragraphs 0005, 0022, and 0023; see also Figure 1), the system comprising:

- a) a communication interface (such as packet interfaces 54, Figure 4; see also Specification, paragraph 0043); and
- b) a control system (such as control system 48, Figure 4; see also Specification, paragraph 0043), associated with the communication interface and adapted to:
 - i) receive a request for a temporary directory number, which has been temporarily assigned to the mobile terminal by the wireless network (Specification, paragraphs 0005, 0023, 0024, 0030, and 0036; see also Figure 1, steps D, E, and/or F, and Figure 2B, steps 156 and 158);
 - ii) retrieve the temporary directory number (Specification, paragraphs 0023, 0024, 0027, 0029, 0030, and 0037; see also Figure 1, steps G-I, and Figure 2B, steps 160-164); and
 - iii) provide the temporary directory number during the first call to allow a wireless connection to be established with the mobile terminal via the wireless network (Specification, paragraphs 0005, 0006, 0017, 0024, 0026, 0031, 0037, and 0038; see also Figure 1, steps J-L, and Figure 2C, steps 174-196).

Claims 29-32 are argued separately.

Claim 29 depends from claim 1 and further comprises detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a bit error rate associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold (Specification, paragraphs 0005, 0017, 0026, 0035, and 0036).

Claim 30 depends from claim 1 and adds the limitation of detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a degradation in quality associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold (Specification, paragraphs 0005, 0017, 0026, 0035, and 0036).

Claim 31 depends from claim 1 and adds the further limitation of detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting an inability to communicate with the mobile terminal via a local wireless interface (Specification, paragraphs 0005, 0017, 0026, 0035, and 0036).

Claim 32 depends from claim 1 and further comprises detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a decrease in signal strength associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold (Specification, paragraphs 0005, 0017, 0026, 0035, and 0036).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether claims 1-28 were properly rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,411,802 B1 to Cardina et al. (hereinafter “Cardina”).

B. Whether claim 29 was properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardina in view of U.S. Patent No. 6,766,170 B1 to Aretz et al. (hereinafter “Aretz”).

C. Whether claims 30-32 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardina in view of U.S. Patent No. 6,445,921 B1 to Bell (hereinafter “Bell”).

(7) ARGUMENT

A. Introduction

Claims 1-28 were rejected under 35 U.S.C. § 102(b) as being anticipated by Cardina. For the Patent Office to establish anticipation, the Patent Office must show where each and every element of the claims is shown in a single reference. MPEP § 2131. Anticipation is a strict requirement which has not been met in this case. Claims 1 and 15 recite a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network in which the method comprises of several steps, including providing a temporary directory number “during the call” to allow a wireless connection to be established with the mobile terminal via the wireless network. Cardina does not teach providing a temporary number “during the call” to allow a wireless connection to be established with the dual mode mobile terminal via the wireless network. There is no mention in Cardina of: (1) transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network; or (2) providing a temporary directory number during the call to allow a wireless connection to be established with the mobile terminal via the wireless network. Thus, since Cardina does not teach each and every element of claims 1 and 15, Cardina does not anticipate these claims. Therefore, claims 1 and 15, and the claims that depend from claims 1 and 15, are allowable.

With respect to claims 29-32, the Patent Office is improperly combining the references using hindsight to reconstruct the claimed invention by using Appellant’s disclosure as a template. In particular, the Patent Office has not provided any evidence to support the motivation to combine the references. In addition, with respect to claim 29, the Patent Office is ignoring the fact that there is no reasonable expectation that the system of Cardina would even work with the system of Aretz. MPEP § 2143.02. At the very least, incorporating the system of Aretz into Cardina would impermissibly change the principle of operation of Cardina and/or render Cardina unsatisfactory for its intended purpose. MPEP § 2143.01. With respect to claims 30-32, the Patent Office is impermissibly ignoring the fact that Bell specifically teaches away from the claimed invention, stating that “there is no need to monitor the strength of signals.” (Bell, col. 6, lines 56-57). Even if the secondary references Aretz and Bell were properly combined, a point Appellant does not concede, the Patent Office has not shown where all the elements of the claims are shown with sufficient particularity to sustain an obviousness rejection. Aretz and Bell also fail to teach or suggest a method for transitioning a call with a dual mode

mobile terminal from a wireline network to a wireless network, wherein a temporary directory number is provided “during the call” to allow a wireless connection to be established with the mobile terminal via the wireless network. In addition, with respect to claims 30-32, Bell does not teach or suggest detecting degradation in quality, an inability to communicate with the mobile terminal, or a decrease in signal strength.

As such, Appellant requests that the Board reverse the Examiner and instruct the Examiner to allow the claims for these reasons.

B. Summary of the References

1. U.S. Patent No. 6,411,802 B1 to Cardina

Cardina relates to a wireless telephone backup device for landline telephone equipment that may be located on the customer side of the landline service connection (Cardina, Abstract). An interconnection circuit in the backup device detects service interruptions in the subscriber’s landline connection and powers on a wireless device to provide backup telephone service. *Ibid.* The interconnection circuit also provides normal features for standard landline telephone service. *Ibid.* The wireless backup device forwards incoming landline calls to the wireless unit in the backup device, and may send a message notifying the maintenance center of the service interruption, and may send an alarm to the CPE site notifying the subscriber. *Ibid.* Notably, Cardina’s wireless unit is used only when a service interruption is detected. The use of the wireless backup device happens before or during call setup, not during a call. In fact, Cardina teaches that when a service interruption occurs to the wireline connection (the only time the backup wireless device is used), the customer cannot use the CPE to receive or send calls (Cardina, col. 11, lines 28-32).

2. U.S. Patent No. 6,766,170 B1 to Aretz

Aretz is directed to a method for the radio coverage of a mobile terminal in the catchment area of an intermediate station which is used as an adverter (Aretz, col. 1, lines 8-11). In the case of an existing connection between the mobile terminal and the mobile radio network, a connection is first set up on an internal frequency and the connection is then handled via the intermediate station (Aretz, Abstract). In the case of an existing connection from a mobile terminal via an intermediate station to the mobile radio network, the intermediate station will

hand over the connection directly to the mobile radio network when the mobile terminal is removed from the internal area of reception. *Ibid.* In the case of a new connection being set up, the mobile terminal first, or after an unsuccessful attempt to connect with a mobile radio frequency, attempts to establish connection to an intermediate station on an internal frequency. *Ibid.*

3. U.S. Patent No. 6,445,921 B1 to Bell

Bell is directed to a dual mode telephone and method where dropped calls are re-established by the telephone without data from base stations or networks (Bell, col. 1, lines 6-11). Bell discloses a dropped call resulting from failure of the cordless first link L₅, for example, due to moving out of range of the cordless base station (see, e.g., Bell, col. 5, lines 24-28). However, Bell does not teach or suggest detecting degradation in quality, an inability to communicate with the mobile terminal, or a decrease in signal strength, as recited in claims 30-32. In fact, Bell specifically states that “there is no need to monitor the strength of signals.” (Bell, col. 6, lines 56-57).

C. Legal Standards

1. For Establishing Anticipation

Section 102 of the Patent Act provides the statutory basis for an anticipation rejection and states *inter alia*:

A person shall be entitled to a patent unless

(e) the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language. . . .

The Federal Circuit’s test for anticipation has been set forth numerous times. “It is axiomatic that for prior art to anticipate under 102 it has to meet every element of the claimed invention.” *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed. Cir. 1986). This standard has been reinforced. “To anticipate a claim, a reference must disclose

every element of the challenged claim and enable one skilled in the art to make the anticipating subject matter.” *PPG Indus. Inc. v. Guardian Indus. Corp.*, 75 F.3d 1558, 1577 (Fed. Cir. 1996) (citations omitted). Further, “a finding of anticipation requires that the publication describe all of the elements of the claims, arranged as in the patented device.” *C.R. Bard Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1349 (Fed. Cir. 1998) (emphasis added and citations omitted).

2. For Establishing Obviousness

Section 103(a) of the Patent Act provides the statutory basis for an obviousness rejection and reads as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Courts have interpreted 35 U.S.C. § 103(a) as being a question of law based on underlying facts. As the Federal Circuit stated:

Obviousness is ultimately a determination of law based on underlying determinations of fact. These underlying factual determinations include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) the extent of any proffered objective indicia of nonobviousness.

Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH, 139 F.3d 877, 881 (Fed. Cir. 1998) (internal citations omitted).

The burden is on the Patent Office to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988). “To reach a proper conclusion under § 103, the decisionmaker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made.” *Id.* at 1073 (quoting *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1566 (Fed. Cir. 1987) (paraphrase in *Fine*’s original text)). “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *In re Fine* at 1075. The Patent Office may not ignore portions of the reference which teach away from the combination. *Baxter Int’l Inc. v. McGaw Inc.*, 149 F.3d 1321, 1328 (Fed. Cir. 1998). “[I]n general, a reference

will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

The "case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). "Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight." *Ibid*.

The Federal Circuit notes

that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved . . . **The range of sources available, however, does not diminish the requirement for actual evidence.** That is, the showing must be clear and particular. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence."

Ibid (emphasis added and internal citations omitted).

For a *prima facie* case of obviousness, the combination must teach or fairly suggest all the claim elements. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. If the Patent Office fails to establish obviousness, then the Appellant is entitled to a patent. *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002).

D. Claims 1-28 Are Not Anticipated Because Cardina Fails to Teach a Method for Transitioning a Call With a Dual Mode Mobile Terminal from a Wireline Network to a Wireless Network That Includes Providing a Temporary Directory Number During the Call to Allow a Wireless Connection to Be Established With the Mobile Terminal Via the Wireless Network

Claims 1-28 were rejected under 35 U.S.C. § 102(b) as being anticipated by Cardina. For the Patent Office to establish anticipation, the Patent Office must show where each and every element of the claims is shown in a single reference. MPEP § 2131. Anticipation is a strict requirement.

The present invention is designed to facilitate the transition of a mobile terminal from a cordless mode to a cellular mode. That is, a user will have a dual mode mobile terminal. In the

first mode, occurring typically when the user is at the user's premises, the mobile terminal will function in the cordless mode by interfacing via a terminal adaptor with the PSTN. Only if the user and the mobile terminal leave the effective zone of the terminal adaptor is the mobile terminal switched into the cellular mode, wherein the mobile terminal interfaces with the PLMN. If the mobile terminal is involved in a call when the mobile terminal moves out of the terminal adaptor zone, the phone call is transitioned from the PSTN to the PLMN. This transition is accomplished by providing a temporary directory number during the call to allow a wireless connection to be established with the mobile terminal via the wireless network.

In contrast, Cardina discloses a wireless telephone backup device that is located on the customer side of the landline service connection that is used to provide backup telephone services to the CPE when there are service interruptions to the landline connection. The wireless backup device forwards incoming landline calls to the wireless unit in the backup device, and may send a message notifying the maintenance center of the service interruption and an alarm to the CPE site notifying the subscriber. Notably, Cardina's wireless unit is used only when a service interruption is detected. The use of the wireless backup device happens before or during call setup, not during a call. In fact, Cardina teaches that when a service interruption occurs to the wireline connection (the only time the backup wireless device is used), the customer cannot use the CPE to receive or send calls (Cardina, col. 11, lines 28-32). Thus, Cardina is directed to a system in which a backup wireless device takes the place of a wireline device when there is a service interruption. Notably, Cardina does not disclose that the service interruption takes place during a call. Thus, Cardina is not directed to a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network where a temporary directory number is provided during the call to allow a wireless connection to be established with the mobile terminal via the wireless network.

Claim 1 recites a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network, wherein the mobile terminal is provided with a primary directory number associated with the wireline network, the method comprising:

- a) receiving a request for a temporary directory number, which has been temporarily assigned to the mobile terminal by the wireless network;
- b) accessing the temporary directory number; and

c) providing the temporary directory number during the call to allow a wireless connection to be established with the mobile terminal via the wireless network.

Independent system claim 15 recites similar limitations. As such both claims 1 and 15 recite a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network in which the method comprises of several steps, including providing a temporary directory number “during the call” to allow a wireless connection to be established with the mobile terminal via the wireless network. As set forth above, Cardina does not teach providing a temporary number “during the call” to allow a wireless connection to be established with the dual mode mobile terminal via the wireless network. There is no mention in Cardina of: (1) **transitioning** a call with a dual mode mobile terminal from a wireline network to a wireless network; or (2) providing a temporary directory number **during the call** to allow a wireless connection to be established with the mobile terminal via the wireless network. Thus, since Cardina does not teach each and every element of claims 1 and 15, Cardina does not anticipate these claims. Therefore, claims 1 and 15 are allowable.

The Patent Office cites to Cardina at col. 17, lines 13-41 as allegedly teaching a dual mode phone system where a call may be transitioned from a wireline network to a wireless network (see Final Office Action mailed August 24, 2006, pp. 12-13). However, the cited portion of Cardina merely states that when the system recognizes that the landline service has been restored, calls are no longer routed to the backup wireless device, but instead are routed to the terminating SSP originally servicing the directory number. Cardina teaches that when service interruptions to the subscriber’s landline connection are detected, the backup wireless device is powered up to provide backup telephone service (Cardina, Abstract). The backup wireless device then provides normal features for standard landline telephone service. *Ibid.* The wireless backup device forwards incoming landline calls to the wireless unit in the backup device. *Ibid.* During this time, the wireline phone is not functional; only the backup wireline device is operational. Then when the system recognizes that the landline service has been restored, calls are no longer routed to the backup wireless device, but instead are routed to the terminating SSP originally servicing the directory number. At this point, only the landline phone is used. At no time is there a transition of a call from a wireline network to a wireless network, wherein the temporary directory number is provided **during the call** to allow a wireless

connection to be established with the mobile terminal via the wireless network, as required by the claimed invention.

Notably, Cardina's wireless unit is used only when a service interruption is detected. The use of the wireless backup device happens before or during call setup, not during a call. In fact, Cardina teaches that when a service interruption occurs to the wireline connection (the only time the backup wireless device is used), the customer cannot use the CPE to receive or send calls (Cardina, col. 11, lines 28-32). This is not equivalent to the claimed invention, which recites a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network in which the method comprises of several steps, including providing a temporary directory number "during the call" to allow a wireless connection to be established with the mobile terminal via the wireless network.

The Patent Office also attempts to argue that Cardina discloses providing the temporary directory number during the call at column 17, line 37 through column 18, line 30 (Final Office Action mailed August 24, 2006. pp. 13-14). The Patent Office recites a long description of how the MTSO 110 and the HLR 112 work. The Patent Office then states that "[t]he home location register (HLR) 112 provides the temporary directory number to the mobile telephone switching office (MTSO) 110 (during the call)." *Id.* at p. 13, lines 17-18. Appellant respectfully disagrees. The directory number of the backup wireless device in Cardina is not provided during the call.

The Patent Office cites to Cardina at col. 17, line 37 through col. 18, line 30 in support of its position. Appellant has reviewed the cited section and sees nothing to support the allegation that the temporary directory number is provided to the MTSO during the call. In fact, the cited section supports Appellant's position that the directory number for the backup wireless device is provided before or during call setup, not during a call. The cited section corresponds to Figure 6 of Cardina. Figure 6 makes it clear that the directory number of the backup wireless device is provided before or during call setup, and not during a call. The MTSO 110 receives a message from the wireless device in step 602, gets the directory number for the wireless device in step 604, registers the wireless device in step 606, enters a database to reference the landline directory number to the wireless device directory number in step 608, and sets a software trigger in step 610 to forward calls to the temporary directory number. Calls are then forwarded to the temporary directory number in step 612. Only then are calls routed to the directory number and telephone service provided (see Cardina, Figure 6, steps 602-616 and column 17, line 37 through

column 18, line 64). Thus, the directory number of the backup wireless device is provided before calls are set up. It is clear from Figure 6 and the accompanying description that Cardina does not teach providing the directory number of the backup wireless device during the call. Since Cardina does not teach providing the temporary directory number during the call, Cardina cannot anticipate claims 1 and 15.

Claims 2-14 and 16-28 depend from claims 1 and 15, respectively, and contain all the limitations of their respective independent claims. Claim 2-14 and 16-28 are therefore patentable for at least the same reasons as claims 1 and 15.

E. Claim 29 Is Non-Obvious

1. The Combination of Cardina and Aretz Is Improper

Claim 29 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardina in view of Aretz. To establish *prima facie* obviousness, the Patent Office must show where each and every element of the claim is taught or suggested in the combination of references. In addition, for the Patent Office to combine references in an obviousness rejection, the Patent Office must prove there is a suggestion to combine the references. For the Patent Office to prove that there is a suggestion to combine the references, the Patent Office must do two things. First, the Patent Office must state a motivation to combine the references, and second, the Patent Office must support the stated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). MPEP § 2143.03. If the Patent Office cannot establish obviousness, the claims are allowable.

Appellant respectfully submits that the proposed combination of Cardina and Aretz is improper because the Patent Office has not supported the stated motivation to combine Cardina and Aretz with actual evidence. The Patent Office stated that it would have been obvious to combine Cardina and Aretz “in order to switch independently between both network or [sic] switch on request by the mobile terminal.” (Final Office Action mailed August 24, 2006, p. 9). The Patent Office then cites to an asserted advantage of the Aretz system (see Aretz, col. 3, lines 55-63). However, the cited advantage of Aretz has nothing to do with the Patent Office’s stated motivation of being able to switch independently between both network and switch on request by the mobile terminal, and thus does not support the stated motivation. Moreover, the system of Cardina does not discuss the ability to switch independently between both network and switch on

request by the mobile terminal. In fact, Cardina is incapable of such ability since the wireless backup device only works when the landline connection is non-functioning. There is no other network or switch that is discussed in Cardina that could be the basis of switching between networks or switches. Thus, there is no reasonable expectation that the system of Cardina would even work with the system of Aretz. MPEP § 2143.02. At the very least, incorporating the system of Aretz into Cardina would impermissibly change the principle of operation of Cardina and/or render Cardina unsatisfactory for its intended purpose. MPEP § 2143.01. Since the stated motivation to combine Cardina and Aretz is not supported by actual evidence, and the proposed combination is also improper because there is no reasonable expectation of success and the combination would impermissibly change the principle of operation of Cardina and/or render Cardina unsatisfactory for its intended purpose, the proposed combination is improper. Accordingly, the rejection is improper and must be withdrawn.

2. The Combination of Cardina and Aretz Does Not Teach or Suggest Each and Every Element of Claim 29

Even if the combination is proper, a point Appellant does not concede, claim 29 is still non-obvious for a separate reason. Claim 29 depends from claim 1 and therefore contains all of the limitations of claim 1. As set forth above, Cardina does not teach transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network where a temporary directory number is provided during the call. Aretz does not cure the deficiencies of Cardina in this regard. Thus, neither Cardina nor Aretz, either alone or in combination, teach or suggest the claimed invention, and claim 29 is allowable for at least the same reasons as claim 1.

F. Claims 30-32 Are Non-Obvious

1. The Combination of Cardina and Bell Is Improper

Claims 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardina in view of Bell. The standards for obviousness are set forth above.

Appellant respectfully submits that the proposed combination of Cardina and Bell is improper because the Patent Office has not supported the stated motivation to combine Cardina and Bell with actual evidence. The Patent Office stated it would have been obvious to combine Cardina and Bell “in order to switch independently between both network or [sic] switch on

request by the mobile terminal.” (Final Office Action mailed August 24, 2006, p. 10). The Patent Office then cites to an advantage of the Aretz system (see Aretz, col. 3, lines 55-63). This is the same motivation used by the Patent Office for claim 29 to combine Cardina and Aretz. However, the cited advantage of Aretz has nothing to do with Bell and does not support the stated motivation of being able to switch independently between both network and switch on request by the mobile terminal. Since the Patent Office has quoted Aretz, it has not provided any actual evidence to support the stated motivation to combine Cardina and Bell. Since the stated motivation lacks the requisite support, the proposed combination is improper. Since the proposed combination is improper, the rejection is also improper and must be withdrawn.

2. The Combination of Cardina and Bell Does Not Teach or Suggest Each and Every Element of Claims 30-32

Even if the combination is proper, a point Appellant does not concede, claims 30-32 are still non-obvious for a separate reason. Claims 30-32 depend from claim 1 and therefore contain all of the limitations of claim 1. As set forth above, Cardina does not teach transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network where a temporary directory number is provided during the call. Neither Aretz nor Bell cures the deficiencies of Cardina in this regard. Thus, the cited references, either alone or in combination, do not teach or suggest the claimed invention, and claims 30-32 are allowable for at least the same reasons as claim 1.

In addition, claims 30-32 have additional limitations. Claim 30 recites detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a degradation in quality associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold. Claim 31 recites detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting an inability to communicate with the mobile terminal via a local wireless interface. Claim 32 recites detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a decrease in signal strength associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold.

Bell does not teach or suggest detecting “a degradation in quality associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold,” or “an inability to communicate with the mobile terminal via a local wireless interface,” or “a decrease in signal strength associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold.” Bell merely discloses a dropped call resulting from failure of the cordless first link L₅, for example, due to moving out of range of the cordless base station (see Bell, col. 5, lines 24-28). There is no teaching or suggestion of detecting degradation in quality, an inability to communicate with the mobile terminal, or a decrease in signal strength, as recited in claims 30-32. In fact, Bell specifically teaches away from the claimed invention, stating that “there is no need to monitor the strength of signals.” (Bell, col. 6, lines 56-57). Since Bell does not teach or suggest detecting degradation in quality, an inability to communicate with the mobile terminal, or a decrease in signal strength, as recited in claims 30-32, and the Patent Office has admitted that Cardina does not teach these elements (see Final Office Action mailed August 24, 2006, pp. 9-11), the combination of Cardina and Bell does not teach or suggest each and every limitation of claims 30-32. Accordingly, claims 30-32 are patentable for this additional reason.

G. Conclusion

The claimed invention is a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network in which the method comprises of several steps, including providing a temporary directory number “during the call” to allow a wireless connection to be established with the mobile terminal via the wireless network. Cardina does not teach providing a temporary number “during the call” to allow a wireless connection to be established with the dual mode mobile terminal via the wireless network. There is no mention in Cardina of: (1) **transitioning** a call with a dual mode mobile terminal from a wireline network to a wireless network; or (2) providing a temporary directory number **during the call** to allow a wireless connection to be established with the mobile terminal via the wireless network. Thus, since Cardina does not teach each and every element of the claimed invention, the claimed invention is patentable.

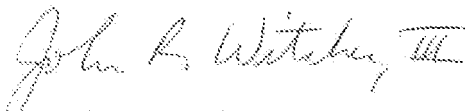
With respect to claims 29-32, the Patent Office is improperly combining the references using hindsight to reconstruct the claimed invention by using Appellant’s disclosure as a

template. In particular, the Patent Office has not provided any evidence to support the motivation to combine the references. In addition, with respect to claim 29, the Patent Office is ignoring the fact that there is no reasonable expectation that the system of Cardina would even work with the system of Aretz. MPEP § 2143.02. At the very least, incorporating the system of Aretz into Cardina would impermissibly change the principle of operation of Cardina and/or render Cardina unsatisfactory for its intended purpose. MPEP § 2143.01. With respect to claims 30-32, the Patent Office is impermissibly ignoring the fact that Bell specifically teaches away from the claimed invention, stating that "there is no need to monitor the strength of signals." (Bell, col. 6, lines 56-57). Even if the secondary references Aretz and Bell were properly combined, a point Appellant does not concede, the Patent Office has not shown where all the elements of the claims are shown with sufficient particularity to sustain an obviousness rejection. Like Cardina, Aretz and Bell also fail to teach or suggest a method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network, wherein a temporary directory number is provided "during the call" to allow a wireless connection to be established with the mobile terminal via the wireless network. In addition, with respect to claims 30-32, Bell does not teach or suggest detecting degradation in quality, an inability to communicate with the mobile terminal, or a decrease in signal strength.

For the above reasons, Appellant requests that the Board reverse the Examiner and instruct the Examiner to allow the claims for these reasons.

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By: 

John R. Witcher, III
Registration No. 39,877
100 Regency Forest Drive, Suite 160
Cary, NC 27518
Telephone: (919) 238-2300

Date: February 8, 2007
Attorney Docket: 7000-271

(8) APPENDIX

1. A method for transitioning a call with a dual mode mobile terminal from a wireline network to a wireless network, wherein the mobile terminal is provided with a primary directory number associated with the wireline network, the method comprising:
 - a) receiving a request for a temporary directory number, which has been temporarily assigned to the mobile terminal by the wireless network;
 - b) accessing the temporary directory number; and
 - c) providing the temporary directory number during the call to allow a wireless connection to be established with the mobile terminal via the wireless network.
2. The method of claim 1 wherein an initial connection for the call is established through the wireline network via a terminal adaptor.
3. The method of claim 2 wherein the request is received from the terminal adaptor and the temporary directory number is provided to the terminal adaptor.
4. The method of claim 3 wherein the terminal adaptor initiates establishment of the wireless connection and transfer of the call from a wireline connection to the wireless connection.
5. The method of claim 4 wherein the terminal adaptor is coupled to a wireline switch in the wireline network and the terminal adaptor initiates establishment of the wireless connection by sending a request to the wireline switch to establish a connection to the mobile terminal via the wireless network using the temporary directory number and wherein the transfer of the call from the wireline connection to the wireless connection is effected by the wireline switch.
6. The method of claim 1 wherein the temporary directory number is accessed from the wireless network.
7. The method of claim 6 wherein the temporary directory number is accessed via a home location register associated with the wireline network.

8. The method of claim 7 wherein the home location register accesses the temporary directory number from a visiting location register associated with the wireless network.
9. The method of claim 8 wherein the visiting location register accesses the temporary directory number from a wireless switch, which facilitates the wireless connection with the mobile terminal.
10. The method of claim 2 wherein the mobile terminal registers with the wireless network while being served by the wireline network.
11. The method of claim 10 wherein the mobile terminal registers with the wireless network while a connection is established via the wireline network.
12. The method of claim 10 wherein the mobile terminal registers with the wireless network prior to a connection being established via the wireline network.
13. The method of claim 10 wherein the mobile terminal registers with the wireless network prior to transitioning to the wireless connection.
14. The method of claim 1 further comprising:
 - a) establishing a wireline connection via the wireline network;
 - b) establishing the wireless connection via the wireless network; and
 - c) transferring the call with the mobile terminal from the wireline connection to the wireless connection.
15. A system for transitioning a first call with a dual mode mobile terminal from a wireline network to a wireless network, wherein the mobile terminal is provided with a primary directory number associated with the wireline network, the system comprising:
 - a) a communication interface; and
 - b) a control system associated with the communication interface and adapted to:

- i) receive a request for a temporary directory number, which has been temporarily assigned to the mobile terminal by the wireless network;
- ii) retrieve the temporary directory number; and
- iii) provide the temporary directory number during the first call to allow a wireless connection to be established with the mobile terminal via the wireless network.

16. The system of claim 15 wherein an initial connection for the first call is established through the wireline network via a terminal adaptor.

17. The system of claim 16 wherein the request is received from the terminal adaptor and the temporary directory number is provided to the terminal adaptor.

18. The system of claim 17 wherein the terminal adaptor initiates establishment of the wireless connection and transfer of the first call from a wireline connection to the wireless connection.

19. The system of claim 18 wherein the terminal adaptor is coupled to a wireline switch in the wireline network and the terminal adaptor initiates establishment of the wireless connection by sending a request to the wireline switch to establish a connection to the mobile terminal via the wireless network using the temporary directory number and wherein the transfer of the first call from the wireline connection to the wireless connection is effected by the wireline switch.

20. The system of claim 15 wherein the temporary directory number is accessed from the wireless network.

21. The system of claim 20 wherein the temporary directory number is accessed via a home location register associated with the wireline network.

22. The system of claim 21 wherein the home location register accesses the temporary directory number from a visiting location register associated with the wireless network.

23. The system of claim 22 wherein the visiting location register accesses the temporary directory number from a wireless switch, which facilitates the wireless connection with the mobile terminal.
24. The system of claim 16 wherein the mobile terminal registers with the wireless network while being served by the wireline network and the temporary directory number is generated in response to the mobile terminal registering with the wireless network.
25. The system of claim 24 wherein the mobile terminal registers with the wireless network while a connection is established via the wireline network.
26. The system of claim 24 wherein the mobile terminal registers with the wireless network while prior to a connection being established via the wireline network.
27. The system of claim 24 wherein the mobile terminal registers with the wireless network prior to transitioning to the wireless connection.
28. The system of claim 15 further comprising a wireline switch adapted to:
- a) establish a wireline connection with a terminal adapter;
 - b) initiate a second call to the mobile terminal using the temporary directory number to establish the wireless connection via the wireless network; and
 - c) transfer the first call with the mobile terminal from the wireline connection to the wireless connection.
29. The method of claim 1 further comprising detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a bit error rate associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold.
30. The method of claim 1 further comprising detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by

detecting a degradation in quality associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold.

31. The method of claim 1 further comprising detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting an inability to communicate with the mobile terminal via a local wireless interface.

32. The method of claim 1 further comprising detecting the mobile terminal moving out of a wireless communication zone in which communications with the mobile terminal are possible by detecting a decrease in signal strength associated with communications with the mobile terminal via a local wireless interface surpassing a defined threshold.

(9) EVIDENCE APPENDIX

Appellant relies on no evidence, thus this appendix is not applicable.

(10) RELATED PROCEEDINGS APPENDIX

As there are no related proceedings, this appendix is not applicable.